

NATIONAL WEATHER SERVICE INSTRUCTION 10-512

JULY 16, 2004

Operations and Services

Public Weather Services, NWSPD 10-5

NATIONAL SEVERE WEATHER PRODUCTS SPECIFICATION

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-512, dated April 4, 2003. This directive adds Valid Time Event Code and marine zones to the Watch Outline Update Message product specification (Section 7) and changes the Watch Status Message format (Section 12).

Signed _____

07/02/04 _____

Gregory A. Mandt

Date

Director, Office of Climate,
Water, and Weather Services

National Severe Weather Products Specification

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1. Introduction. This procedural instruction describes the narrative and graphical severe weather products issued by the Storm Prediction Center (SPC) for the contiguous United States (CONUS).

2. **Categorical Convective Outlook (product category SWODY1, SWODY2 and SWODY3 and graphics PGWE46, PGWI47, and PGWK48)**

2.1 Mission Connection. SPC issues narrative and graphical Categorical Convective Outlooks to provide CONUS Weather Forecast Offices (WFOs), the public, media and emergency managers with the potential for severe and general convection during the next 72 hours.

2.2 Issuance Guidelines.

2.2.1 Creation Software. SPC will use the National Centers NAWIPS editor for text products, and the SPC graphics editor for graphical products.

2.2.2 Issuance Criteria. Categorical Outlooks are a scheduled product.

2.2.3 Issuance Time. Day One Outlook: 0600, 1300, 1630, 2000 and 0100 UTC
 Day Two Outlook: 0830 (0730 during daylight savings time), 1730 UTC
 Day Three Outlook: 1100 UTC

2.2.4 Valid Time. The valid time is from the time of issuance until 1200 UTC the next convective day.

2.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next day.

2.3 Technical Description. Categorical outlooks should follow the format and content described in this section.

2.3.1 Mass News Disseminator Broadcast Line. None.

2.3.2 Mass News Disseminator Header. The SWO MND header is “DAY (ONE, TWO OR THREE) CONVECTIVE OUTLOOK”.

2.3.3 Content. The Categorical Convective Outlook defines areas of slight, moderate and/or high risk of severe thunderstorms. A convective day is a 24 hour or less period beginning at 1200 UTC or other scheduled issuance time and ending at 1200 UTC the next day (i.e. 1200 UTC today to 1200 UTC tomorrow). The Day One and Day Two outlooks also define areas of where there is at least a 10% or greater probability of (general) thunderstorms. SPC has the option to use “SEE TEXT” for areas where convection may approach or slightly exceed severe criteria (wind gusts 50 knots or greater or hail 3/4 inch diameter size or greater). Two letter postal state identifiers are used to specify all or parts of states in moderate or high risk areas.

SPC will issue a Public Severe Weather Outlook when a high risk is forecast. Convective Outlook narratives will reference Public Severe Weather Outlooks. SPC should issue narrative and graphical forecasts at the same time. The contour for “General Thunder” in the graphical forecast refers to a 10% or greater chance of non-severe convection. Day Three Outlooks do not forecast the 10 percent probability of severe convection. SPC may issue high risk areas for Day Two and Day Three outlooks for forecast extreme severe weather events.

DAY 1

<u>Category</u>	<u>Element</u>	<u>Probability</u>	<u>Extreme</u>
SLGT	Hail	5%	YES
	Hail	15-25%	YES or no
	Hail	35%	no
		or	
	Wind	5%	YES
	Wind	15-25%	YES or no
	Wind	35%	no
		or	
	Tornado	5%	YES or no

NOTE: 5% hail and wind (no SIG), and 2% tornado are equivalent to **SEE TEXT**.

MDT	Hail	35%	YES
	Hail	45%	YES or no
		or	
	Wind	35%	YES
	Wind	45%	no
		or	
	Tornado	15%	YES or no
	Tornado	25%	no

HIGH	Hail	n/a	n/a
		or	
	Wind	45%	YES
		or	
	Tornado	25%	YES
	Tornado	35-45%	YES or no

DAY 2 and DAY 3

SLGT	15-25% <i>all severe</i>	YES or no
MDT (day 2 only)	35-45% <i>all severe</i>	YES or no

NOTE: 5% *all severe* is equivalent to **SEE TEXT** (only use SIG area with 15% or greater).

Figure 1. Conversion from Probabilistic to Categorical Forecasts Chart

2.3.4 Format.

ACUS01 KWNS ddhhmm
SWODYn

DAY (ONE, TWO OR THREE) CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

VALID DDHHMM - DDHHMMZ

THERE IS A (SLIGHT, MODERATE, HIGH) RISK OF SEVERE THUNDERSTORMS TO THE RIGHT OF LINE (LIST OF ANCHOR POINTS AND DIRECTION AND DISTANCE IN STATUTE MILES FROM THE LINE). THE LINE WILL ENCLOSE THE AREA OF RISK. THERE MAY BE ONE OR MORE AREAS OF RISK AT THE APPROPRIATE LEVEL OF RISK. WHEN A MODERATE OR HIGH RISK IS FORECAST, THE INDIVIDUAL STATES ARE ALSO LISTED WITH THE TWO LETTER POSTAL STATE IDENTIFIERS.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM (LIST OF ANCHOR POINTS AND DIRECTION AND DISTANCE IN STATUTE MILES FROM THE LINE). THERE MAY BE ONE OR MORE AREAS OF GEN TSTMS LISTED.

...AREA OF CONCERN #1...

AREAS OF HIGHEST RISK ARE DISCUSSED FIRST (HIGH SEVERE RISK, MODERATE SEVERE RISK, SLIGHT SEVERE RISK, APPROACHING SEVERE LIMITS). THE FORECAST PROVIDES A NARRATIVE TECHNICAL DISCUSSION.

...AREA OF CONCERN #2...

NARRATIVE TECHNICAL DISCUSSION

\$\$

..FORECASTER NAME.. MM/DD/YY

Figure 2. Categorical Outlook Format

2.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format and grammatical errors. SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

3. Probabilistic Convective Outlook (product category RGB0A1, RGB0A2, RGB0A3).

3.1 Mission Connection. SPC issues probabilistic convective outlooks to provide CONUS WFOs, the public, media, and emergency managers with specific severe weather threats during the next 72 hours. SPC assigns each threat with a percent likelihood of occurrence.

3.2 Issuance Guidelines.

3.2.1 Creation Software. SPC will use the National Centers NAWIPS editor.

3.2.2 Issuance Criteria.

Probabilistic Convective Outlooks are a scheduled product.

3.2.3 Issuance Time. Day One Outlook: 0600, 1300, 1630, 2000 and 0100 UTC
Day Two Outlook: 0830 (0730 during daylight savings time), 1730 UTC
Day Three Outlook: 1100 UTC

3.2.4 Valid Time. The valid time is from the time of issuance until 1200 UTC the next day.

3.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next convective day.

3.3 Technical Description. Probabilistic outlooks should follow the format and content described in this section.

3.3.1 Mass News Disseminator Broadcast Line. Not applicable.

3.3.2 Mass News Disseminator Header. Not applicable.

3.3.3 Content. SPC will issue probabilistic convective outlooks in a Red-Book graphic format. The Day One Outlook will consist of separate graphics for tornadoes, hail, and damaging winds. The Day Two and Three Outlooks will have combined severe thunderstorm probabilities in one graphic. These outlooks provide numerical probabilities of severe weather within 25 statute miles of any point within a given area. The probability thresholds/contours in each graphic are as follows:

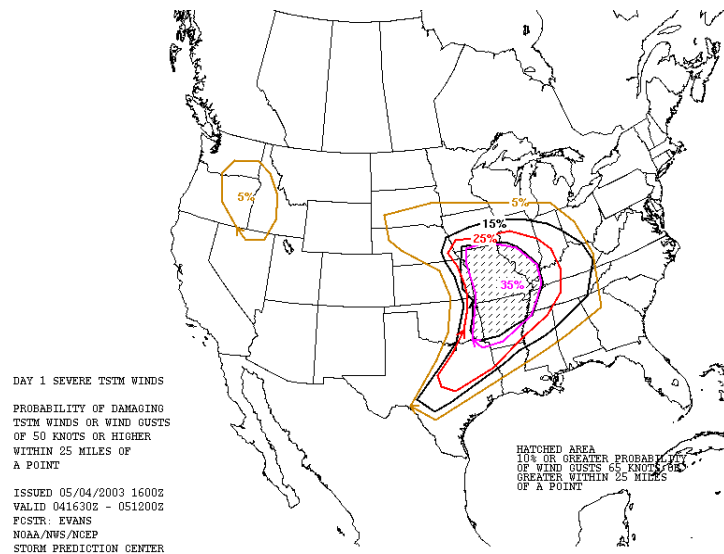
Day One Outlook for tornadoes: 2, 5, 15, 25, 35, and 45%

Day One Outlook for damaging winds: 5, 15, 25, 35, and 45%

Day One Outlook for severe hail: 5, 15, 25, 35, and 45%

Day Two and Three Outlooks (combined events): 5, 15, 25, 35, and 45%

SPC will indicate an “extreme area” on individual probabilistic graphical products when there is a 10% chance of tornadoes that could produce F2 or greater damage, two inch or greater diameter hail, and/or sixty five knot or greater convective wind gusts within 25 miles of any one point of a defined area.

3.3.4 Format.Day One Outlook
(Convective Wind)**Figure 3.** Probabilistic Outlook Example

3.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

4. **SPC Points Product (product category PTSDY1, PTSDY2, PTSDY3).**

4.1 Mission Connection. SPC issues the Points Product to provide CONUS WFOs, the public, media, and emergency managers with the latitude and longitude locations of the points that make up the SPC Categorical and Probabilistic Convective Outlook areas.

4.2 Issuance Guidelines.

4.2.1 Creation Software. SPC uses automated software.

4.2.2 Issuance Criteria. Points Products are scheduled products.

4.2.3 Issuance Time. Day One Outlook: 0600, 1300, 1630, 2000 and 0100 UTC
Day Two Outlook: 0830 (0730 during daylight savings time), 1730 UTC
Day Three Outlook: 1100 UTC

4.2.4 Valid Time. The valid time is from the time of issuance until 1200 UTC the next day.

4.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next day.

4.3 Technical Description. The SPC Points Product should follow the format and content described in this section.

4.3.1 Mass News Disseminator Broadcast Line. Not applicable.

4.3.2 Mass News Disseminator Header. Not applicable.

4.3.3 Content. SPC will issue three separate products for the Day 1, Day 2, and Day 3 outlooks. The Day 1 product provides the points for the Probabilistic Outlooks for tornado, large hail and damaging winds, and the associated Categorical Outlook. The Day 2 and 3 products list the points for the Probabilistic Outlook for all severe (tornadoes, large hail, and damaging winds combined) weather events and the associated Categorical Outlook. Points for areas of extreme events are also part of this product.

4.3.4 Format.

```

WUUS01 KWNS 071644
PTSDY1

DAY 1 CONVECTIVE OUTLOOK AREAL OUTLINE
NWS STORM PREDICTION CENTER NORMAN OK
1044 AM CST THU MAR 07 2002

VALID TIME 071630Z - 081200Z

Probabilistic Outlook Points Day 1

... TORNADO ...

... HAIL ...

0.05      40589152 40569341 40849511 41859542 42849334 43379115
          43618840 42788784 41758812 40589152

... WIND ...

Categorical Outlook Points Day 1

... CATEGORICAL ...

TSTM      27858270 27768038
TSTM      44048294 42588393 41848548 41228741 40408989 39919189
          40159378 40469553 42269617 43749485 44809259 45399002
          45638711 45598391
TSTM      42971145 41030788 39440678 37760706 37160812 37040940
          36931221 37011420 37531605 38541801 39651994 41462002
          42341867 43141684 42971145

$$

```

Figure 4. Points Product Example

4.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will amend outlooks for format errors. SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

5. **Public Severe Weather Outlook (product category PWOSPC).**

5.1 Mission Connection. Public Severe Weather Outlooks alert the CONUS WFOs, public, media, and emergency managers to the seriousness of a particularly dangerous convective situation. These outlooks also define the threat area and provide information on the timing of a convective outbreak.

5.2 Issuance Guidelines.

5.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

5.2.2 Issuance Criteria. SPC forecasts a high risk of severe thunderstorms or a significant convective event (see 5.3.3 Content for details).

5.2.3 Issuance Time. The Public Weather Outlooks is an event driven product (see 5.3.3 for more details).

5.2.4 Valid Time. The valid time is from the time of issuance to expiration.

5.2.5 Product Expiration Time. The product expiration time will be the time of the next PWO issuance or 1200 UTC the next day if no other issuances are expected.

5.3 Technical Description. Public severe weather outlooks should follow the format and content described in this section.

5.3.1 Mass News Disseminator Broadcast Line. None.

5.3.2 Mass News Disseminator Header. The PWO MND header is “PUBLIC SEVERE WEATHER OUTLOOK.”

5.3.3 Content. SPC will issue a Public Severe Weather Outlook when it forecasts any of the following conditions:

- a. High risk of severe thunderstorms in the Categorical Day One Outlook;
- b. 25% or greater probability of tornadoes, and a forecast of a 10% or greater probability of tornadoes which could cause F2 or greater damage within this area; or
- c. 45% or greater probabilities of convective damaging wind gusts in conjunction with a 10% chance or 65 knot or greater wind gusts.

If a High Risk is initiated on the 0600 UTC Day 1 Outlook, a PWO will be issued at approximately 1000 and 1700 UTC. If the High Risk is initialized at 1300 UTC Day 1 Outlook,

a PWO will be issued at 1300 and 1700 UTC. A PWO may also be written around 2000 UTC for a high risk that is expected to occur during the overnight hours.

5.3.4 Format.

```
WOUS40 KWNS ddhhmm
PWOSPC
STZ000>099-CWZ000>099-ddhhmm-
```

```
PUBLIC SEVERE WEATHER OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy
```

```
....HEADLINE OF PARTICULARLY DANGEROUS SITUATION (LOCATION AND
TIMING)...
```

```
A NARRATIVE PLAIN LANGUAGE DISCUSSION OF THE PARTICULARLY
DANGEROUS CONVECTIVE THREAT. THE SPC FORECASTER SHOULD DEFINE
THE LOCATION...TIMING AND REASONING FOR THIS OUTLOOK. THE
REASONING SHOULD BE KEPT IN TERMS THE PUBLIC WILL UNDERSTAND.
INCLUDE CALL TO ACTION STATEMENTS AS REQUIRED.
```

```
$$
```

```
...FORECASTER NAME...
```

Figure 5. Public Severe Weather Outlook Format

5.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format and grammatical errors. PWOs will not be amended.

6. Watch County List (product category WCL).

6.1 Mission Connection. SPC issues Watch County Lists to collaborate with CONUS WFOs on proposed counties, parishes, independent cities and/or adjacent coastal water marine zones to be included in a convective watch.

6.2 Issuance Guidelines.

6.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

6.2.2 Issuance Criteria. SPC forecasts weather conditions expected to approach or exceed Severe Thunderstorm or Tornado Watch issuance criteria (see Sections 8.2.2 and 9.2.2).

- 6.2.3 Issuance Time. Watch County Lists are non-scheduled, event driven products.
- 6.2.4 Valid Time. Not applicable. Watch County Lists are an internal product.
- 6.2.5 Product Expiration Time. Not applicable. The AWIPS Message Handling System is used to keep the Watch County List product internal to the NWS.
- 6.3 Technical Description. Watch county lists will follow the format and content described in this section.
- 6.3.1 Mass News Disseminator Broadcast Line. Not applicable.
- 6.3.2 Mass News Disseminator Header. Not applicable.
- 6.3.3 Content. WFOs and SPC are partners in the convective watch process. In the spirit of partnership, WFOs and SPC work toward a consensus convective watch area and duration before, during and at the end of convective watches. This partnership is defined as collaboration.

SPC uses the Watch County List (WCL) to alert affected WFOs to a proposed convective watch. WFOs may call the SPC and propose a new watch area. SPC will provide the proposed counties, parishes and independent cities segmented by state in the watch area, adjacent coastal water marine zones and a proposed expiration time. Adjacent coastal water marine zones refer to near shore responsibility (out to 20 nautical miles for oceans). All Great Lakes marine zones will be included in convective watches.

SPC generates and sends the list through AWIPS to the affected WFOs. SPC will list WFOs in the proposed watch in the ATTN Line of the Watch County List in order to activate the Watch Warning Advisory (WWA) software. WWA software decodes this list into a graphical display of counties and independent cities in each WFO's county warning area. The list and graphical display on WWA serve as the basis for a mandatory collaboration conference call between SPC and the affected WFOs prior to a watch issuance. SPC will attempt to individually contact affected WFO(s) which are unable to participate in the collaboration conference call. The affected WFOs and SPC will collaborate on the final list of counties, parishes, independent cities and marine zones to be included in the initial convective watch area. If a consensus cannot be reached through collaboration or SPC is unable to contact an affected WFO(s) during the collaboration call or individually, SPC will decide on the final list of counties, parishes, independent cities and marine zones for all affected WFOs for the initial convective watch area.

6.3.4 Format.

```

NWUS64 KWNS ddhhmm
WCLx

.(TORNADO OR SEVERE THUNDERSTORM) WATCH x
COORDINATION COUNTY LIST FROM THE NWS STORM PREDICTION CENTER EFFECTIVE UNTIL
HHMM UTC.

STC001-003-ddhhmm-

ST
. STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1 INDEPENDENT CITIES INCLUDED ARE

LIST OF INDEPENDENT CITIES
$$

STC001-003-ddhhmm-

ST
. STATE 2 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 2 INDEPENDENT CITIES INCLUDED ARE

LIST OF INDEPENDENT CITIES
$$

CW
. ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES
$$

ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOS AFFECTED BY THE
PROPOSED WATCH).
```

Figure 6. Watch County List Format

6.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct lists for format and grammatical errors. WCLs will not be amended.

7. **Watch Outline Update Message (product category WOU).**

7.1 Mission Connection. SPC issues Watch Outline Update Messages (WOU)

to provide CONUS WFOs, emergency managers, the media and the general public with the names of all counties, parishes, independent cities and marine zones in a convective watch area.

7.2 Issuance Guidelines.

7.2.1 Creation Software. SPC will use the National Centers NAWIPS software to create WOUs.

7.2.2 Issuance Criteria. SPC will issue an initial WOU for every CONUS convective watch. SPC will issue update WOUs at least at the top of each hour to update the status of active convective watches. SPC will issue a final WOU to notify customers that a watch has been cancelled.

7.2.3 Issuance Time. SPC will issue initial WOUs at the same time the Public and Aviation Watch Notification Messages are issued. SPC will issue update WOUs for active convective watches at least at the top of each hour. SPC will issue final WOUs at the watch expiration time.

7.2.4 Valid Time. WOUs are valid for one hour.

7.2.5 Product Expiration Time. The expiration time is up to one hour after the time of product issuance.

7.3 Technical Description. WOUs will follow the format and content described in this section.

7.3.1 MND Broadcast Line. SPC will use “BULLETIN - IMMEDIATE BROADCAST REQUESTED” in WOUs only for the initial issuance of this watch product. The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

7.3.2 MND Header. The WOU MND header is “TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn”, where “nnnn” is the watch number.

7.3.3 Content. SPC will issue WOUs for the time zone(s) the watch area is located. WOUs will be segmented by states and marine areas. WOUs will include all counties, independent cities and adjacent coastal water marine zones in a watch area. Adjacent coastal water marine zones refer to near shore responsibility (out to 20 nautical miles for oceans). All Great Lakes marine zones will be included in convective watches. The initial WOU automatically generates the initial Watch County Notification Messages (WCN) for the affected WFOs. As a result of the collaboration call, the counties, parishes, independent cities and marine zones listed in the initial WOU will match the counties, parishes, independent cities and marine zones listed in the initial WCNs issued by the affected WFOs.

The content of update WOUs are collected from the latest WCNs issued by the WFOs and issued at least at the top of each hour. Update WOUs will include all counties, independent cities and marine zones which remain in or have been added to the watch area during the past hour.

NCEP software will collect WCNs up to 55 minutes past the hour. SPC will issue a final WOU to inform national and regional partners and customers that the convective watch is no longer in effect for any portion of the watch area. The UGC Line in the final WOU will list the counties, parishes, independent cities and marine zones which were in the convective watch at the time of the last hourly update.

SPC will collaborate with affected WFOs when counties, parishes, independent cities, or marine zones are transferred from an existing convective watch to a new watch (e.g. watch replacement).

7.3.4 Format.

```

WOUS64 KWNS ddhhmm
WOUn

BULLETIN - IMMEDIATE BROADCAST REQUESTED (Initial Issuance Only)
TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

TORNADO (or SEVERE THUNDERSTORM) WATCH nnnn IS IN (or REMAINS IN) EFFECT UNTIL hhmm
AM/PM XDT FOR THE FOLLOWING LOCATIONS:

STC001-003-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZB-yymmddThhnnZE/

ST
. STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1 INDEPENDENT CITIES INCLUDED ARE

LIST OF CITIES

$$

nMZ001-003-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZB-yymmddThhnnZE/

CW
. ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES

$$

ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOS AFFECTED BY THE
WATCH).
```

Figure 7. Watch Outline Update Message

(Watch No Longer in Effect- Final Update)

WOUS64 KWNS ddhhmm
WOU_n

STC001-003-nMZ001-003-ddhhmm-
/k.CAN.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

TORNADO (or SEVERE THUNDERSTORM) WATCH nnnn IS NO LONGER IN EFFECT.

NO COUNTIES (OR PARISHES, INDEPENDENT CITIES OR MARINE ZONES) REMAIN IN THE
WATCH.
\$\$

ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOS ORIGINALLY AFFECTED
BY THE WATCH).

7.4 Updates, Amendments and Corrections. SPC will update WOUs at least at the top of each hour. SPC will correct WOUs for format and grammatical errors. WOUs are not amended.

8. **Aviation Watch Notification Message (product category SAW).**

8.1 Mission Connection. SPC issues Aviation Watch Notification Messages to alert the aviation community to organized thunderstorms forecast to produce tornadic and/or severe weather as indicated in Public Watch Notification Messages.

8.2 Issuance Guidelines.

8.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

8.2.2 Issuance Criteria. A convective watch is in effect.

8.2.3 Issuance Time. Aviation Watch Notification Messages are non-scheduled, event driven products.

8.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

8.2.5 Product Expiration Time. The expiration time is at the end of the watch valid time.

8.3 Technical Description. Aviation Watch Notification Messages will follow the format and content described in this section.

8.3.1 Mass News Disseminator Broadcast Line. Not applicable.

8.3.2 Mass News Disseminator Header. Not applicable.

8.3.3 Content. SPC will issue the SAW after the convective watch area has been collaborated with the affected WFOs. SPC forecasters may define the area as a rectangle (X miles either side of line from point A to point B) or as a parallelogram (X miles north and south or east and west of line from point A to point B). Distances of the axis coordinates should be in statute miles. The aviation coordinates reference navigational aid VHF Omni-Directional Range (VOR) locations and state distances will be in nautical miles. SPC will give valid times in UTC. The watch half width will be in statute miles. The Aviation Watch Notification Message will contain hail size in inches or half inches (forecaster discretion for tornado watches associated with hurricanes) surface and aloft, surface convective wind gusts in knots, maximum tops, and the Mean Storm Motion Vector.

8.3.4 Format.

```
WWUS30 KWNS ddhhmm
SAWn
SPC AWW ddhhmm
WWnnnn SEVERE TSTM ST LO DDHHMMZ - DDHHMMZ
AXIS...XX STATUTE MILES EITHER SIDE OF A LINE
XXDIR CCC/LOCATION ST/ - XXDIR CCC/LOCATION ST
..AVIATION COORD.. XX NM EITHER SIDE /XXDIR CCC - XXDIR CCC
HAIL SURFACE AND ALOFT..X X/X INCHES. WIND GUSTS..XX KNOTS.
MAX TOPS TO XXX. MEAN STORM MOTION VECTOR DIR/SPEED
```

Figure 8. Aviation Severe Weather Watch Notification Message Format

8.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. SPC will correct watches for format and grammatical errors.

9. Public Severe Thunderstorm Watch Notification Message (product category SEL).

9.1 Mission Connection. SPC issues Public Severe Thunderstorm Watch Notification Messages to alert CONUS WFOs, the public, media and emergency managers to organized thunderstorms forecast to produce six and more hail events of 3/4 inch (penny) diameter and/or greater or damaging winds of 50 knots (58 mph) or greater.

9.2 Issuance Guidelines.

9.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

9.2.2 Issuance Criteria. SPC should issue a Public Severe Thunderstorm Watch Notification Message when there is a forecast of six or more hail events of 3/4 inch (penny) diameter or greater or damaging winds of 50 knots (58 mph) or greater. The forecast event minimum thresholds should be at least 2 hours over an area at least 8,000 square miles. Below these thresholds, SPC in collaboration with affected WFOs may issue convective watches along coastlines, near the Canadian and Mexican borders, and for any ongoing organized severe convection.

9.2.3 Issuance Time. Public Severe Thunderstorm Watch Notification Messages are non-scheduled, event driven products.

9.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

9.2.5 Product Expiration Time. The expiration time is the end of the watch valid time.

9.3 Technical Description. Public Severe Thunderstorm Watch Notification Messages will follow the format and content described in this section.

9.3.1 Mass News Disseminator Broadcast Line. Public Severe Thunderstorm Watch Notification Messages will include the broadcast line “URGENT - IMMEDIATE BROADCAST REQUESTED.” The term “URGENT” is used when the information may wait until a stop-set to be broadcast.

9.3.2 Mass News Disseminator Header. The Public Severe Thunderstorm Watch Notification Message MND header is “SEVERE THUNDERSTORM WATCH nnnn.”

9.3.3 Content. A Public Severe Thunderstorm Watch Notification Message will contain the area description and axis, watch expiration time, a description of hail size and thunderstorm wind gusts expected, the definition of a watch, a call to action statement, a list of other valid watches, a brief discussion of meteorological reasoning, and technical information for the aviation community (see example).

SPC will include the term “adjacent coastal waters” when the watch affects coastal waters adjacent to the Pacific/Atlantic coast, Gulf of Mexico, or Great Lakes. Adjacent coastal waters refers to a WFO’s near shore responsibility (out to 20 miles for oceans), except for convective watches which include portions of the Great Lakes. SPC will coordinate with affected WFOs to determine which counties, parishes, independent cities, and/or marine zones are in the initial watch and meteorological reasoning prior to a watch being issued. SPC will issue a watch cancellation message (under both SEL and SAW products) when there are no counties, parishes, independent cities and/or marine zones remaining in the watch area prior to the expiration time. The text of the message will specify the number and area of the cancelled watch.

SPC will designate a Public Severe Thunderstorm Watch Notification Message as “particularly dangerous” in two situations. The first situation occurs when conditions are favorable for widespread significant non-tornadic severe weather events (convective winds greater than 65 knots and/or hail diameter greater than 2.0 inches). The second situation occurs when a well defined, large bow echo has developed, there is evidence of destructive convective winds occurring at the surface, the bow echo is moving at 48 knots or greater, and downstream conditions suggest the bow echo will be maintained or intensify for the duration of the watch.

9.3.4 Format.

WWUS20 KWNS ddhhmm

SELn

STZ000>099-CWZ000>099-ddhhmm-

URGENT - IMMEDIATE BROADCAST REQUESTED
SEVERE THUNDERSTORM WATCH NUMBER nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

THE STORM PREDICTION CENTER HAS ISSUED A
SEVERE THUNDERSTORM WATCH FOR PORTIONS OF

PORTION OF STATE
PORTION OF STATE
AND ADJACENT COASTAL WATERS (IF REQUIRED)

EFFECTIVE (TIME PERIOD) UNTIL hhmm am/pm time_zone.

...THIS IS A PARTICULARLY DANGEROUS SITUATION (IF FORECAST)...

HAIL TO X INCHES IN DIAMETER...THUNDERSTORM WIND GUSTS TO XX MPH...
AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

NARRATIVE DESCRIPTION OF WATCH AREA USING A LINE AND ANCHOR
POINTS. DISTANCES TO EITHER SIDE OF THE LINE WILL BE IN STATUTE MILES.

CALL TO ACTION STATEMENTS

OTHER WATCH INFORMATION...OTHER WATCHES IN EFFECT AND IF THIS
WATCH REPLACES A PREVIOUS WATCH.

NARRATIVE DISCUSSION OF REASON FOR THE WATCH.

AVIATION...BRIEF DESCRIPTION OF SEVERE WEATHER THREAT TO AVIATORS.
HAIL SIZE WILL BE GIVEN IN INCHES AND WIND GUSTS IN KNOTS. MAXIMUM
STORM TOPS AND A MEAN STORM VECTOR WILL ALSO BE GIVEN.

\$\$

..FORECASTER NAME.. MM/DD/YY

Figure 9. Public Watch Notification Message Format (for Severe Thunderstorms)

9.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct watches for format and grammatical errors.

10. **Public Tornado Watch Notification Message (product category SEL).**

10.1 Mission Connection. SPC issues Public Tornado Watch Notification Messages to alert CONUS WFOs, the public, media and emergency managers to organized thunderstorms forecast to produce three or more tornadoes or any tornado which could produce F2 or greater damage.

10.2 Issuance Guidelines.

10.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

10.2.2 Issuance Criteria. SPC should issue a Public Tornado Watch Notification Message when there is a forecast of three or more tornadoes or any tornado which could produce F2 or greater damage. The forecast event minimum thresholds should be at least 2 hours over an area at least 8,000 square miles. Below these thresholds, SPC in collaboration with affected WFOs may issue convective watches along coastlines, near the Canadian and Mexican borders and for any ongoing organized severe convection.

10.2.3 Issuance Time. Public Tornado Watch Notification Messages are non-scheduled, event driven products.

10.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

10.2.5 Product Expiration Time. The expiration time is the end of the watch valid time.

10.3 Technical Description. Public Tornado Watch Notification Messages will follow the format and content described in this section.

10.3.1 Mass News Disseminator Broadcast Line. Public Tornado Watch Notification Messages will include the broadcast line “URGENT - IMMEDIATE BROADCAST REQUESTED.” The term “URGENT” is used when the information may wait until a stop-set to be broadcast.

10.3.2 Mass News Disseminator Header. The Public Tornado Watch Notification Message MND header is “TORNADO WATCH nnnn.”

10.3.3 Content. A Public Tornado Watch Notification Message will contain the area description and axis, watch expiration time, the term “damaging tornadoes”, a description of the largest hail size and strongest thunderstorm wind gusts expected, the definition of a watch, a call to action statement, a list of other valid watches, a brief discussion of meteorological reasoning, and technical information for the aviation community (see example).

SPC will include the term “adjacent coastal waters” when the watch affects coastal waters adjacent to the Pacific/Atlantic coast, Gulf of Mexico, or Great Lakes. Adjacent coastal waters refers to a WFO’s near shore responsibility (out to 20 nautical miles for oceans), except for convective watches which include portions of the Great Lakes. SPC will coordinate with affected WFOs to determine which counties, parishes, independent cities and/or marine zones are in the initial watch and meteorological reasoning prior to a watch being issued. SPC will issue a watch cancellation message (under both SEL and SAW products) whenever it cancels a watch prior to the expiration time. The text of the message will specify the number and area of the cancelled watch. SPC will designate a Public Tornado Watch Notification Message as “particularly dangerous” when there is a likelihood of multiple strong tornadoes (damage of F2 or F3) or at least one violent (damage of F4 or F5) tornado. SPC will refer to tornadoes as “destructive” for PDS Tornado Watches.

10.3.4 Format.

WWUS20 KWNS ddhhmm

SELn

STZ000>099-CWZ000>099-ddhhmm-

URGENT - IMMEDIATE BROADCAST REQUESTED

TORNADO WATCH NUMBER nnnn

NWS STORM PREDICTION CENTER NORMAN OK

time am/pm time_zone day mon dd yyyy

THE STORM PREDICTION CENTER HAS ISSUED A
TORNADO WATCH FOR PORTIONS OF

PORTION OF STATE
PORTION OF STATE
AND ADJACENT COASTAL WATERS (IF REQUIRED)

EFFECTIVE (TIME PERIOD) UNTIL hhmm am/pm time_zone.

...THIS IS A PARTICULARLY DANGEROUS SITUATION (IF FORECAST)...

DESTRUCTIVE TORNADOES...HAIL TO X INCHES IN DIAMETER...THUNDERSTORM WIND
GUSTS TO XX MPH...AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

NARRATIVE DESCRIPTION OF WATCH AREA USING A LINE AND ANCHOR POINTS.
DISTANCES TO EITHER SIDE OF THE LINE WILL BE IN STATUTE MILES.

CALL TO ACTION STATEMENTS

OTHER WATCH INFORMATION...OTHER WATCHES IN EFFECT AND IF THIS WATCH
REPLACES A PREVIOUS WATCH.

NARRATIVE DISCUSSION OF REASON FOR THE WATCH.

AVIATION...BRIEF DESCRIPTION OF SEVERE WEATHER THREAT TO AVIATORS. HAIL
SIZE WILL BE GIVEN IN INCHES AND WIND GUSTS IN KNOTS. MAXIMUM STORM TOPS
AND A MEAN STORM VECTOR WILL ALSO BE GIVEN.

\$\$

..FORECASTER NAME.. MM/DD/YY

Figure 10. Public Watch Notification Message Format (for Tornadoes)

10.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will amend Public Watch Notification Messages for format and grammatical errors.

11. **Watch Corner Points Message (product category SEVSPC).**

11.1 Mission Connection. SPC issues Watch Corner Points Messages to provide affected customers with outline latitude/longitude coordinates of all active convective watches.

11.2 Issuance Guidelines.

11.2.1 Creation Software. SPC uses automated software.

11.2.2 Issuance Criteria. A convective watch is in effect.

11.2.3 Issuance Time. Watch Corner Points Messages are both event driven and scheduled products.

11.2.4 Valid Time. The valid time is until the issuance of the next scheduled update.

11.2.5 Product Expiration Time. The expiration time is at the end of the watch valid time.

11.3 Technical Description. Watch corner points messages will follow the format and content described in this section.

11.3.1 Mass News Disseminator Broadcast Line. Not applicable.

11.3.2 Mass News Disseminator Header. Not applicable.

11.3.3 Content. SPC will issue Watch Corner Points Messages to provide CONUS WFOs, the public, media and emergency managers with outline latitude/longitude coordinates of all valid watches. These points are used for the radar summary chart when watches are valid or in effect.

11.3.4 Format.

(Watches in Effect)

WWUS60 KWNS ddhhmm
SEVSPC

SEVR 971126 1801 WT0792 2300
02903.09250 03135.09136 03135.08822 02903.08941 02903.08941;

SEVR 971126 1801 WT0793 0000
02957.08110 03248.08751 03248.08456 02957.08621 02903.08941 02903.08941;

(No Watch in Effect)

WWUS60 KWNS ddhhmm
SEVSPC

FILE CREATED DD-MMM-YY AT HH:MM:SS UTC
NO WATCHES CURRENTLY ACTIVE

Figure 11. Watch Corner Points Message Format

11.3 Updates, Amendments and Corrections. Updates are scheduled. SPC will correct messages for format errors.

12. **Watch Status Message (product category WWASPC).**

12.1 Mission Connection. SPC issues Watch Status Messages to provide CONUS WFOs, media, emergency managers and the public with an assessment of the severe weather threat within each active convective watch area.

12.2 Issuance Guidelines.

12.2.1 Creation Software. SPC uses the National Centers NAWIPS text editor.

12.2.2 Issuance Criteria. A convective watch is in effect.

12.2.3 Issuance Time. SPC should issue a Watch Status Message at 30 minutes past the hour for each active convective watch area.

12.2.4 Valid Time. The status message is valid for one hour.

12.2.5 Product Expiration Time. The expiration time is one hour after the issuance time.

12.3 Technical Description. Watch status messages will follow the format and content described in this section.

12.3.1 Mass News Disseminator Broadcast Line. Not applicable.

12.3.2 Mass News Disseminator Header. Not applicable.

12.3.3 Content. SPC uses the Watch Status Message to help CONUS WFOs, media, emergency management, and the public determine portions of a convective watch they cancel or extend in time and/or area from their county warning area. This message will include a recommended list of what counties, parishes, independent cities and marine zones should remain in the watch area, and a geographical linear description of where the severe weather hazard continues using known points. SPC should refer customers to related mesoscale convective discussions (product SWOMCD) for additional information on mesoscale features related to the severe weather hazard, and local convective watch products for the official list of counties, parishes, independent cities and marine zones cleared from the watch area.

12.3.4 Format.

WOUS20 KWNS ddhhmm
WWASPC
SPC WW-A ddhhmm
STZ000-STZ000-STZ000-ddhhmm

STATUS REPORT ON WT (or WS) nnnn

SEVERE WEATHER THREAT CONTINUES TO THE RIGHT OF A LINE FROM XX DIR CCC...XX DIR
CCC...XX DIR CCC.

THE SEVERE WEATHER THREAT CONTINUES FOR THE FOLLOWING AREAS

&&

STC001-003-ddhhmm-

ST
. STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1 INDEPENDENT CITIES INCLUDED ARE

LIST OF CITIES

\$\$

nMZ001-003-ddhhmm-

CW
. ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES

\$\$

FOR ADDITIONAL INFORMATION...SEE MESOSCALE DISCUSSION XXX.

THE WATCH STATUS MESSAGE IS FOR GUIDANCE PURPOSES ONLY. PLEASE REFER TO LOCAL
SPECIAL WEATHER STATEMENTS FOR OFFICIAL INFORMATION ON COUNTIES...INDEPENDENT
CITIES AND MARINE ZONES CLEARED FROM SEVERE THUNDERSTORM AND TORNADO
WATCHES.

\$\$

...FORECASTER NAME...MM/DD/YY

Figure 12. Watch Status Message Format

12.4 Updates, Amendments and Corrections. Updates should be issued at the bottom of each hour. SPC will amend messages for format and grammatical errors.

13. **Hourly Severe Weather Report Log (product category STAHR).**

13.1 Mission Connection. SPC issues Hourly Severe Weather Report Logs to provide WFOs, the public, media and emergency managers with hourly text and graphical reports of severe weather events on a national scale.

13.2 Issuance Guidelines.

13.2.1 Creation Software. SPC uses automated software.

13.2.2 Issuance Criteria. WFOs issue new Preliminary Local Storm Reports (LSR) since the last hourly report.

13.2.3 Issuance Time. SPC will issue a report each hour.

13.2.4 Valid Time. Reports are valid upon issuance.

13.2.5 Product Expiration Time. Not applicable.

13.3 Technical Description. Hourly reports will follow the format and content described in this section.

13.3.1 Mass News Disseminator Broadcast Line. None.

13.3.2 Mass News Disseminator Header. The Hourly Report MND header is “SPC HOURLY TORNADO AND SEVERE THUNDERSTORM REPORTS.”

13.3.3 Content. SPC issues hourly report logs to inform the public, the media and emergency managers to severe weather events on a national scale. SPC updates this log on a hourly basis and lists all events since 1200 UTC. Severe weather events reported in Preliminary Storm Reports (LSR) are automatically included in hourly report logs. Events reported in other products as Severe Weather Statements (SVS) or other sources may be manually inserted into hourly report logs. These reports are preliminary information. Final severe weather event information is found in monthly Storm Data reports (see NWSI 10-1605 “Storm Data Preparation”) filed by each WFO and published by the National Climatic Data Center (NCDC).

13.3.4 Format.

NWUS20 KWNS 111033
STAHRV

SPC HOURLY TORNADO AND SEVERE THUNDERSTORM REPORTS
NWS STORM PREDICTION CENTER NORMAN OK
433 AM CST WED OCT 11 2000

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICATION 'STORM DATA'
FOR 06CST TUE OCT 10 2000 THRU 22CST TUE OCT 10 2000

EVENT	LOCATION	REMARKS	(CST) TIME
-------	----------	---------	------------

TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....

80	*TORN 2 SW DUSTER TX	(28 WSW SEP)	10/2145
	PSBL TORNADO; HOMES DMGD; SVRL PERSONS	FTW/LSR	32139865
	HOSPITALIZED		

.....LRG HAIL/STRONG WIND RPTS.....LRG HAIL/STRONG WIND RPTS.....

55	A450 PROFFITT TX	(55 WNW MWL)	10/1905
		FTW/LSR	33199888
12	WNDG BRADY TX	(49 NNE JCT)	10/1642
	SIGNS DOWN. STEEPLE OFF CHURCH; TREES & POWER	SJT/LSR	31139933
	POLES DOWN.		
2	G 56 DRYDEN TX	(17 E P07)	10/1420
	60-70 MPH WND; SPOTTER RPRT	MAF/SVS	300510211

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....

91	A 75 ADDICKS TX	(24 WNW HOU)	10/1215
	DIME SIZED HAIL NR LAMAR HIGH SCHOOL	HOU/LSR	29789565

\$\$

Figure 13. Hourly Report Log Format

How to read an SPC report log:

Event Number: 80 (in chronological order, the 80th severe event received during this 24 hour period).

Event: "*TORN" Tornado.

Location: Occurred 2 SW Duster, TX. Referenced to the closest airport, the Tornado occurred 28 miles west-southwest of Stephenville, TX.

Date/Time: 10/2145 Occurred on the 10th day of the month at 2145 CST.

Details: They are calling this a possible tornado. Further investigation may or may not support this. The event resulted in the hospitalization of several people.

Source: FTW/LSR. Preliminary Local Storm Report issued by the National Weather Service office at Fort Worth, Texas.

Coordinates: The report location was at 32.13 degrees north, 98.65 degrees west.

13.4 Updates, Amendments and Corrections. This product is issued hourly and is not updated. SPC will correct reports for format and grammatical errors.

14. **Daily Severe Weather Report Log (product category STADTS).**

14.1 Mission Connection. SPC issues Daily Severe Weather Report Logs to provide CONUS WFOs, the public, media and emergency managers with text and graphical reports of severe weather events on a national scale for the previous day.

14.2 Issuance Guidelines.

14.2.1 Creation Software. SPC uses automated software.

14.2.2 Issuance Criteria. SPC issues this type of report log daily at 1200 UTC.

14.2.3 Issuance Time. The issuance time will be 1200 UTC. SPC will issue an update at 1800 UTC.

14.2.4 Valid Time. Reports are valid upon issuance.

14.2.5 Product Expiration Time. Not applicable.

14.3 Technical Description. Daily reports will follow the format and content described in this section.

14.3.1 Mass News Disseminator Broadcast Line. None.

14.3.2 Mass News Disseminator Header. The Daily Report MND header is “SPC DAILY TORNADO AND SEVERE THUNDERSTORM REPORTS.”

14.3.3 Content. SPC issues daily report logs in a text and graphical format to inform the public, the media and emergency managers to severe weather events on a national scale for the previous day. These reports are preliminary information. Final severe weather event information is found in monthly Storm Data reports (see NWSI 10-1605 “Storm Data Preparation”) filed by each WFO and published by the National Climatic Data Center (NCDC).

14.3.4 Format.

NWUS20 KWNS 111033
STADTS

SPC DAILY TORNADO AND SEVERE THUNDERSTORM REPORTS
NWS STORM PREDICTION CENTER NORMAN OK
433 AM CST WED OCT 11 2000

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICATION 'STORM DATA'
FOR 12CST TUE OCT 10 2000 THRU 12CST WED OCT 11 2000

EVENT	LOCATION	REMARKS	(CST) TIME
TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....			
80 *TORN	2 SW DUSTER TX	(28 WSW SEP)	10/2145
	PSBL TORNADO; HOMES DMGD; SVRL PERSONS HOSPITALIZED	FTW/LSR	32139865
.....LRG HAIL/STRONG WIND RPTS.....LRG HAIL/STRONG WIND RPTS.....			
55 A450	PROFFITT TX	(55 WNW MWL)	10/1905
		FTW/LSR	33199888
12 WNDG	BRADY TX	(49 NNE JCT)	10/1642
	SIGNS DOWN.STEEPLE OFF CHURCH; TREES & POWER POLES DOWN.	SJT/LSR	31139933
2 G 56	DRYDEN TX	(17 E P07)	10/1420
	60-70 MPH WND; SPOTTER RPRT	MAF/SVS	300510211
.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....			
91 A 75	ADDICKS TX	24 WNW HOU)	10/1215
	DIME SIZED HAIL NR LAMAR HIGH SCHOOL	HOU/LSR	29789565

\$\$

Figure 14. Daily Report Log Format

How to read an SPC report log:

Event Number: 80 (in chronological order, the 80th severe event received during this 24 hour period).

Event: "*TORN" Tornado.

Location: Occurred 2 SW Duster, TX. Referenced to the closest airport, the Tornado occurred 28 miles west-southwest of Stephenville, TX.

Date/Time: 10/2145 Occurred on the 10th day of the month at 2145 CST.

Details: They are calling this a possible tornado. Further investigation may or may not support this. The event resulted in the hospitalization of several people.

Source: FTW/LSR. Preliminary Local Storm Report issued by the National Weather Service office at Fort Worth, Texas.

Coordinates: The report location was at 32.13 degrees north, 98.65 degrees west.

14.4 Updates, Amendments and Corrections. SPC issues a scheduled update at 1800 UTC. SPC will rerun the program, at times, to add additional data from late LSRs into this report.

15. **Monthly Tornado Statistics (product category STAMTS).**

15.1 Mission Connection. SPC issues Monthly Tornado Summary to provide WFOs, the public, media and emergency managers with a preliminary number of tornado reports on a national scale.

15.2 Issuance Guidelines.

15.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

15.2.2 Issuance Criteria. This summary is a scheduled product.

15.2.3 Issuance Time. SPC will issue this summary Monday through Friday at 1200 UTC.

15.2.4 Valid Time. Summaries are valid upon issuance.

15.2.5 Product Expiration Time. Not applicable.

15.3 Technical Description. Summaries will follow the format and content described in this section.

15.3.1 Mass News Disseminator Broadcast Line. None.

15.3.2 MND Header. The Monthly Summary MND header is “STATISTICS FOR TORNADO TOTALS AND TORNADO RELATED DEATHS.”

15.3.3 Content. This summary tabulates the preliminary number of tornado reports listed in WFO LSR(s) issued during the previous month. These numbers consist of reported and confirmed tornadoes. SPC will create the count of tornadoes when Storm Data by the NWS Performance Branch. The national verification program, the National Climatic Data Center, and SPC will confirm the total number of tornadoes, and provide the final update to the monthly summary.

The monthly summary will include data from each of the last three years, and a three year average. The summary will also include the number of killer tornadoes and number of deaths for the current year and three year average.

The summary lists the monthly number of tornadoes for the current and previous two years, and a three year average. The summary also lists statistics for the number of tornado deaths each month of the current year and previous two years, and a three year average. The summary will include the killer tornadoes for the current year and previous two years.

15.3.4 Format.

```

NWUS21 KWNS 151615
STAMTS

MONTHLY TORNADO STATISTICS
NWS STORM PREDICTION CENTER NORMAN OK
1015 AM CST WED FEB 15 2000

STORM PREDICTION CENTER (NORMAN OK)...THROUGH 6 AM CDT 02/15/00
STATISTICS FOR TORNADO TOTALS AND TORNADO RELATED DEATHS

.....NUMBER OF TORNADOES.....          NUMBER OF          KILLER
TORNADOES                                TORNADO DEATHS

.....2000.....  ....1999.....  1998  1997  3YR          3YR
PRELIM SEGMT  PRELIM SEGMT  FINAL  FINAL  AVG  00  99  98  97  AVG  00  99  98
JAN      169    -        20    49    50    35    45  19    -    2    1    2    9    -    2
FEB        9    -        56    78    23    14    38    -   41    1    1   14    -    4    1

MAR        -    -        66    80   102    71    84    -   16   28    6   17    -    4    9
APR        -    -       196   208   114   177   166    -   55    1   12   23    -   14    1
MAY        -    -       309   326   225   235   262    -   10   29    1   13    -    5    3
JUN        -    -       372   400   193   128   240    -    3    -    -    1    -    2    -
JUL        -    -        59    82   188   202   157    -    -    4    1    2    -    -    4
AUG        -    -        32    64    84    72    73    -    -    1    -    1    -    -    1
SEP        -    -        61   109    32   101    81    -    2    1    -    1    -    2    1
OCT        -    -        64    66   100    68    78    -    2    -    -    1    -    2    -
NOV        -    -        18    19    25    55    33    -    -    -    2    1    -    -    -
DEC        -    -         1    -    12    15    15    -    -    -    1    1    -    -    -
SUM      ----  ----  ----  ----  ----  ----  ----  --  --  --  --  --  --  --  --
SUM      178    -     1254  1481  1148  1173  1272  19 129  67  25   77   9  33  22

SEGMENT= NUMBER OF TORNADO SEGMENTS
FINAL=ACTUAL TORNADOES

$$

MCCARTHY

```

Figure 15. Monthly Tornado Statistics Format

The statistics are broken down by month and contain data for the last four years. A "-" in a column means the data is missing or not yet available.

The SPC does not include reports of "unconfirmed" or "possible" tornadoes in the PRELIM numbers. The "SEGMENT" column lists the number of counties where tornadoes occurred (if one tornado is on the ground in two counties, "SEGMENT" gets incremented by two for that tornado).

When the digital Storm Data database arrives from the NWS Office of Climate, Water and Weather Services, FINAL numbers go in that column. The FINAL numbers are considered actual tornadoes by combining like segments to define one tornado.

Along the bottom of the report are totals for the columns and a simplified re-cap. In the example, there were 1254 preliminary (PRELIM) reports of tornadoes in 1999, versus 1481 actual tornadoes FINAL through Dec 1, 1999.

15.4 Updates, Amendments and Corrections. SPC should update this report at least twice per month. SPC will correct reports for inaccurate statistical information, when possible.

16. **Killer Tornado Statistics (product category STATIJ).**

16.1 Mission Connection. SPC issues Killer Tornado Statistics to provide WFOs, the public, media and emergency managers with a list of the dates, locations and number of deaths due to tornadoes since the start of the calendar year on a national scale.

16.2 Issuance Guidelines.

16.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

16.2.2 Issuance Criteria. SPC issues a new list of statistics following new killer tornado events.

16.2.3 Issuance Time. This list is non-scheduled, event driven.

16.2.4 Valid Time. Lists are valid upon issuance.

16.2.5 Product Expiration Time. Not applicable.

16.3 Technical Description. Lists will follow the format and content described in this section.

16.3.1 Mass News Disseminator Broadcast Line. None.

16.3.2 Mass News Disseminator Header. The Statistics MND header is “(YEAR) KILLER TORNADOES.”

16.3.3 Content. This summary will list the dates, times, locations, and number of deaths from killer tornadoes from Jan 1 to the time of the latest report, whether the deaths occurred in a tornado or severe thunderstorm watch, near a watch, or with no watch in effect, the watch number where the death occurred, and the F-scale damage, if available. The summary should list the circumstances in which each death occurred. The summary will also list the number of tornado deaths by state.

16.3.4 Format.

```

NWUS23 KWNS 251415
STATIJ
STORM PREDICTION CENTER (NORMAN OK)

KILLER TORNADO STATISTICS
NWS STORM PREDICTION CENTER NORMAN OK
815 AM CST WED JAN 25 2000

2001 KILLER TORNADOES
PRELIMINARY-SUBJECT TO CHANGE

# DATE    TIME    LOCATION          DEATHS    A  B  C  D  WATCH  F  CIRCUMST
# =====  =====  =====  =====  =  =  =  =  =====  == =====
1 JAN 02    0040  BUNA TX          1      1  0  0  0  WT0003  F2  01M
2 JAN 17    1825  JACKSON TN        7      7  0  0  0  WT0012  F4  07
3 JAN 17    1900  SAULSBURY TN       1      1  0  0  0  WT0012  F1  01
4 JAN 17    1905  ATWOOD TN         1      1  0  0  0  WT0013  F?  01
5 JAN 21    1720  CENTER HILL AR     2      2  0  0  0  WT0018  F2  01M  01V
6 JAN 21    1720  PLEASANT PLAINS AR  1      1  0  0  0  WT0018  F2  01M
7 JAN 21    1847  LITTLE ROCK AR     3      3  0  0  0  WT0018  F3  01M  01V  01P
8 JAN 21    1935  BEEBE AR           2      2  0  0  0  WT0018  F3  02H
9 JAN 22    0330  7N CAMDEN TN        1      1  0  0  0  WT0027  F3  01O
-- -- -- -- --
TOTALS:          19      19  0  0  0
BY STATE:  TN 10  AR 08  TX 01
BY CIRCUMSTANCE:  04M  02H  02V  01O  01P  09
PRELIMINARY THRU 30 JAN 01.

$$

... EDWARDS ...

```

Figure 16. Killer Tornado Statistics Format

The killer tornadoes are listed in the chronological order they happened, by DATE and CST TIME. LOCATION is the one listed in the Preliminary Local Storm Report (see NWSI 10-517 Section 5 "Multiple Purpose Weather Products Specification") or the location listed in the monthly Storm Data report filed by each WFO. Each event will be numbered according to the actual tornado rather than segment when crossing state borders. DEATHS is number of deaths in the whole tornado path -- not just the given location. The ABCD column letters represent the number of deaths:

- A = In tornado watch
- B = In severe thunderstorm watch
- C = "Close" to the watch (15 minutes or 25 miles)
- D = No watch in effect

If the tornado was in a watch, the watch type and number is given. For example, WT0012 is Tornado Watch number 12. If known, the F-scale damage rating of the tornado is listed; if not, a "?" mark is entered. The deaths are broken down by the following circumstances of the victims, if known:

H = House (permanent foundation)
M = Mobile home (a.k.a. "manufactured home")
O = Outdoors (not inside any vehicle, mobile home or permanent building)
P = Permanent structure (school, garage, factory, store, warehouse, etc.)
V = Vehicle (includes parked RVs)

Information for the killer tornadoes list comes from Preliminary Local Storm Reports or Public Information Statements (PNS) issued by WFOs, supplemented by NWS event memorandums and media accounts and monthly Storm Data Reports filed by the WFOs. Since killer tornado information, especially death counts, circumstances and F scale, is often not complete until many days later, these numbers are subject to change as more information arrives.

16.4 Updates, Amendments and Corrections. SPC will update this report as the information becomes available and is deemed reliable. SPC will correct reports for statistical errors.

17. **Operations Administrative Message (product category ADMSPC).**

17.1 Mission Connection. SPC issues Operations Administrative Messages to inform WFOs of changes in SPC operational status (going to or from backup operations) or communications issues (i.e. advance notice of upcoming test convective watches).

APPENDIX A - Examples

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1. Introduction. This appendix provides WFOs and the public with examples of national severe weather products.
2. Categorical Convective Outlook (Graphic).

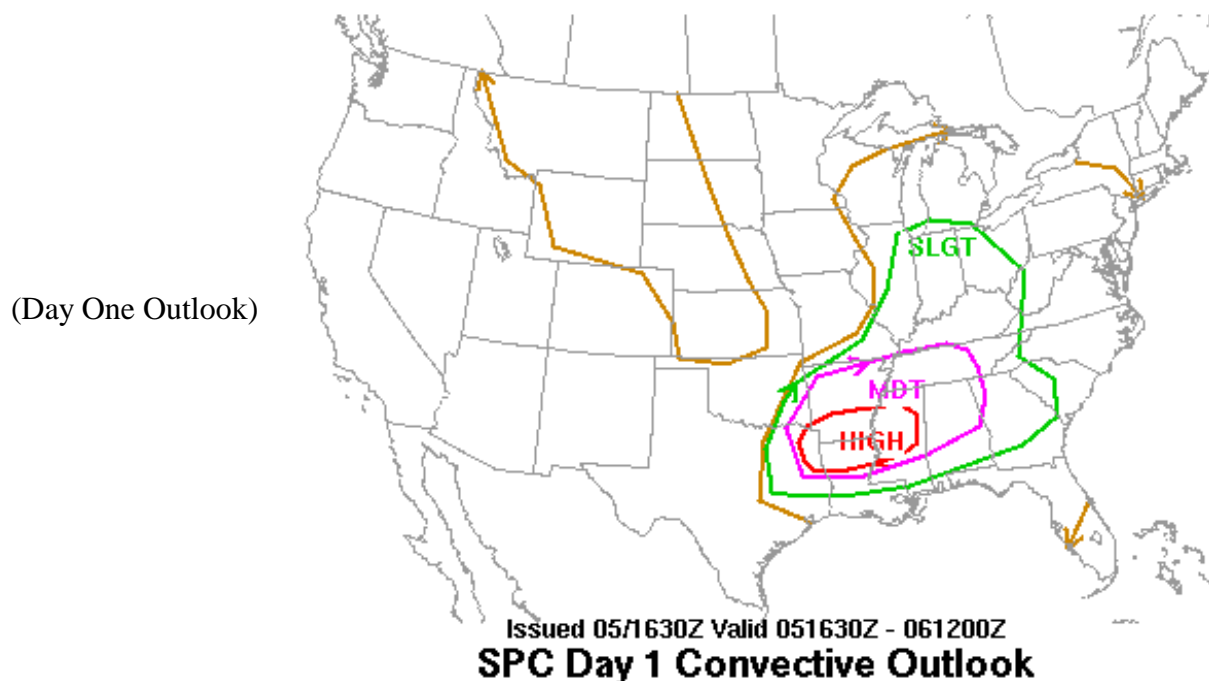


Figure 2. Categorical Convective Outlook

3. Categorical Convective Outlook (Narrative).

SPC AC 051625
 STORM PREDICTION CENTER...NWS/NCEP...NORMAN OK
 DAY 1 CONVECTIVE OUTLOOK...REF AWIPS GRAPHIC PGWE46 KWNS.
 VALID 051630Z - 061200Z

THERE IS A HIGH RISK OF SVR TSTMS THROUGH EARLY TONIGHT FOR PARTS OF NERN TX...SRN AR...NRN LA AND CENTRAL MS. THIS HIGH RISK IS TO THE RIGHT OF A LINE FROM 15 N HEZ 30 NW ESF 45 NNE LFK 10 SW GGG 45 SSE PRX 45 E PRX 15 SSW HOT 10 N PBF UOX 20 NW CBM 15 NNW MEI 25 SE JAN 15 N HEZ.

THERE IS A MDT RISK OF SVR TSTMS ACROSS PARTS OF NERN TX AND SERN OK MUCH OF AR...NRN HALF OF LA...INTO WRN AND MIDDLE TN...NRN AND CENTRAL AL AND NWRN GA. THE MDT RISK SURROUNDS THE HIGH RISK TO THE RIGHT OF A LINE FROM 15 N ARG 30 SSW PAH 20 S BWG 25 NW CSV 35 SSE CSV 25 SE RMG 10 NNW AUO 35 SSE MEI 10 ESE ESF 30 NNW LFK 20

WNW PRX 15 ESE FYV 15 N ARG.

THERE IS ALSO A SLGT RISK OF SVR TSTMS TO THE RIGHT OF A LINE FROM
20 ENE MKO 55 ESE TBN 30 SSE SPI 35 W CGX 20 NNE BEH 20 N TOL
15 SE PKB 10 NW AVL 20 N CAE 30 N SAV 45 NNE MGR 40 NW GPT
30 NNE LCH 45 SSW LFK 30 NNW CLL 30 E ACT DAL MLC 20 ENE MKO.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 60 NW MOT 25 NE PIR
55 NNE BUB 40 W BIE 15 SE MHK 45 ESE ICT 50 SSW P28 15 E EHA
50 NE LAA 55 NW AKO 15 WNW RKS 30 SSE WEY 25 W DLN 85 WNW FCA.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 15 NNE GLS 30 NE AUS
25 NNW DAL 40 SSW JLN 30 E TBN 10 NNW STL 20 WSW PIA 30 SSW DBQ
25 E RST 50 NE EAU 10 W IMT 35 ESE ANJ.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 25 NW SYR 30 WSW ALB
10 WNW ISP.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 30 NNW MLB 30 NW
FMY.

...OUTBREAK OF SEVERE THUNDERSTORMS WITH TORNADOES IS EXPECTED
ACROSS PARTS OF THE LOWER MISSISSIPPI VALLEY THROUGH EARLY
TONIGHT...

STRONG MID/UPPER LEVEL TROUGH WAS CENTERED OVER THE NRN
PLAINS/UPPER MISSISSIPPI VALLEY THIS MORNING. THIS IS RESULTING IN
STRONG MID/UPPER LEVEL FLOW FROM THE SWRN U.S. EWD AND NEWD OVER
THE SRN PLAINS INTO THE LOWER OHIO AND TENNESSEE VALLEY REGION.
MODELS INDICATE THAT THE STRONG TROUGH WILL PERSIST FROM SWRN
CANADA INTO THE NRN ROCKIES AS SEVERAL SHORT WAVE TROUGHS MOVE
RAPIDLY THROUGH THE SRN PLAINS INTO THE OHIO VALLEY.
MORNING SURFACE ANALYSIS SHOWS DEEP LOW OVER NERN IA WITH AN
OCCLUDED FRONT EXTENDING SWD INTO SWRN INDIANA. A COLD FRONT THEN
EXTENDS SWWD THROUGH ANOTHER LOW OVER S CENTRAL OK/N CENTRAL TX WWD
INTO SERN NM. ALSO...A QUASISTATIONARY FRONT EXTENDS FROM SWRN
INDIANA SWD/SEWD THROUGH ERN MIDDLE TN AND NERN GA...THEN EWD
ACROSS SRN PARTS OF SC.

SEVERE THUNDERSTORMS ALREADY EXTEND E-W ALONG A BOUNDARY FROM SRN
AR INTO N CENTRAL AL. LOW LEVEL FLOW EXTENDS FROM SWRN LA INTO
NWRN MS AS 70-80 KT MID LEVEL JET EXTENDS FROM SRN NM ENEWD THROUGH
CENTRAL AR INTO S CENTRAL KY. THUS...DEEP LAYER SHEAR IS PREVALENT
ACROSS THE REGION AT 50-55 KT AND IS EXPECTED TO INCREASE TO 60-65
KT THIS AFTERNOON. AIR MASS IS POTENTIALLY VERY UNSTABLE ACROSS
THE REGION WITH MOST UNSTABLE CAPE TO 4000 J/KG. WITH DAYTIME
HEATING AND MIXING OF THE BOUNDARY LAYER...THIS AIR MASS WILL
REMAIN UNSTABLE WITH MLCAPES TO 3000 J/KG. COMBINATION OF DEEP
LAYER SHEAR AND VERY UNSTABLE AIR MASS IS EXPECTED TO LEAD TO
SEVERAL SUPERCELLS/TORNADOES FROM NERN TX EWD INTO WRN AL THIS
AFTERNOON AND EARLY TONIGHT.

MODELS INDICATE THAT THE SURFACE DRY LINE ACROSS CENTRAL TX MOVES

VERY LITTLE TODAY...BUT COLD FRONT THAT MOVES SWD INTO LA WILL MOVE
NWD LATER TONIGHT AS LOW LEVEL JET ACROSS LA MOVES NWD INTO AR.
SEVERE THUNDERSTORMS ARE EXPECTED TO REDEVELOP AND MOVE NWD INTO AR
BY THE END OF THE PERIOD.

..MCCARTHY.. 05/05/03

4. SPC Points Product.

KWNSPTSDY2

DAY 2 CONVECTIVE OUTLOOK AREAL OUTLINE
STORM PREDICTION CENTER...NWS/NCEP...NORMAN OK
1044 AM CST THU MAR 07 2002

VALID TIME 081200Z - 091200Z

Probabilistic Outlook Points Day 2

... ANY SEVERE ...

0.05	31588905 30759215 29899578 28759842 29349965 30729954 32309886 34359805 36419888 37669935 38699875 40309672 41999406 43229093 43688783 43328549 42448470 39388453 36828582 33158765 31588905
0.15	31389518 32019700 32939773 35149756 36359783 37189817 38249776 39789622 41569321 41689103 41038914 39308715 38058655 36458734 34138926 32589096 31389518
0.25	34649265 33369320 32719532 33799686 37369748 39019667 40639398 40749265 39509210 34649265
SIGN	39489439 38589335 35109281 33009342 32649552 33589681 35729726 37909765 39279617 39489439

Categorical Outlook Points Day 2

... CATEGORICAL ...

SLGT	31389518 32019700 32939773 35149756 36359783 37189817 38249776 39789622 41569321 41689103 41038914 39308715 38058655 36458734 34138926 32589096 31389518
TSTM	29549462 29669615 28759869 29459979 30889950 34319815 37749936 38789854 43459236 47328524
TSTM	42448083 38798250 33678670 29299162

\$\$

5. Public Severe Weather Outlook.

WOUS40 KWNS 031532
PWOSPC
ARZ000-KSZ000-MOZ000-OKZ000-032330-

PUBLIC SEVERE WEATHER OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
0932 AM CST TUE FEB 03 2004

VALID 031532Z - 032330Z

...OUTBREAK OF SEVERE THUNDERSTORMS INCLUDING A FEW STRONG TORNADOES
OVER PARTS OF THE CENTRAL PLAINS TODAY THROUGH TONIGHT.

THE NWS STORM PREDICTION CENTER IN NORMAN OK IS FORECASTING THE
DEVELOPMENT OF A FEW STRONG TORNADOES OVER PARTS OF THE CENTRAL
PLAINS LATER TODAY THROUGH TONIGHT.

THE AREAS MOST LIKELY TO EXPERIENCE THIS ACTIVITY INCLUDE

NORTHWEST ARKANSAS
FAR EASTERN KANSAS
WESTERN AND CENTRAL MISSOURI
EASTERN OKLAHOMA

OTHER SEVERE THUNDERSTORMS WITH DAMAGING WIND...HAIL AND ISOLATED
TORNADOES WILL EFFECT PARTS OF NEBRASKA...IOWA...
ILLINOIS...INDIANA...KENTUCKY...TENNESSEE...ALABAMA...MISSISSIPPI...
LOUISIANA AND TEXAS LATER TODAY AND EARLY MONDAY.

A STRONG LOW PRESSURE AREA NOW IN NORTHWEST KANSAS WILL MOVE TO
WESTERN IOWA THIS EVENING BEFORE CONTINUING NORTHEAST INTO SOUTHERN
MINNESOTA EARLY MONDAY. ASSOCIATED WITH THE LOW...A BAND OF HIGH
LEVEL WINDS WITH SPEEDS IN EXCESS OF 100 MPH WILL OVERSPREAD
KANSAS...OKLAHOMA...MISSOURI AND ARKANSAS LATER TODAY. THESE WINDS
WILL SERVE TO STRENGTHEN THUNDERSTORMS LIKELY TO FORM THIS AFTERNOON
IN A ZONE OF INCREASING WARMTH AND MOISTURE INFLOW SOUTH AND EAST OF
THE LOW. BECAUSE THE THUNDERSTORMS WILL DEVELOP IN AN ENVIRONMENT
WITH WINDS THAT CHANGE IN DIRECTION AND SPEED WITH HEIGHT...AND
BECAUSE THE STORMS WILL LIKELY LAST FOR SEVERAL HOURS...CONDITIONS
WILL BE FAVORABLE FOR A FEW STRONG TORNADOES IN ADDITION TO LARGE
HAIL AND HIGH WINDS.

THIS IS A PARTICULARLY DANGEROUS. THOSE IN THE THREATENED AREA ARE
URGED TO REVIEW SEVERE WEATHER SAFETY RULES AND TO LISTEN TO RADIO
AND TELEVISION AND NOAA WEATHER RADIO FOR POSSIBLE
WATCHES...WARNINGS AND STATEMENTS LATER TODAY.

THIS IS POTENTIALLY A VERY DANGEROUS SITUATION. THOSE IN THE
THREATENED AREA ARE URGED TO REVIEW SEVERE WEATHER SAFETY RULES AND
TO LISTEN TO RADIO...TELEVISION...AND NOAA WEATHER RADIO FOR
POSSIBLE WATCHES...WARNINGS...AND STATEMENTS LATER TODAY.

..CORFIDI.. 02/03/2004

\$\$

6. Watch County List.

NWUS64 KWNS 261705
WCLA

.TORNADO WATCH 1002
COORDINATION COUNTY LIST FROM THE STORM PREDICTION CENTER EFFECTIVE UNTIL 0200
UTC.

ARC013-019-025-027-029-033-039-045-047-051-053-057-059-061-073-081-083-085-
091-097-099-103-105-109-113-115-119-125-127-131-133-139-149-270100-

AR
. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	CONWAY
DALLAS	FAULKNER	GARLAND
GRANT	HEMPSTEAD	HOT SPRING
HOWARD	JEFFERSON	LAFAYETTE
LITTLE RIVER	LOGAN	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEBASTIAN	SEVIER
UNION	WHITE	YELL
\$\$		

LAC013-015-017-027-031-081-119-270100-

LA
. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		
\$\$		

TXC037-063-067-183-203-315-365-459-270100-

TX
. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		
\$\$		

ATTN...WFO...SHV...FTW...LZK...

7. Watch Outline Update MessageInitial Issuance

WOUS64 KWNS 051137
WOU5

BULLETIN - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH OUTLINE UPDATE FOR WT 5
NWS STORM PREDICTION CENTER NORMAN OK
540 AM CST THU FEB 5 2004

TORNADO WATCH 5 IS IN EFFECT UNTIL NOON CST FOR THE
FOLLOWING LOCATIONS:

LAC001-003-005-007-009-011-019-023-025-029-033-037-039-041-043-
045-047-053-055-059-063-065-077-079-091-093-095-097-099-101-105-
107-113-117-121-125-051800-
/O.NEW.KWNS.TO.A.0005.040205T1140Z-040205T1800Z/

LA

. LOUISIANA PARISHES INCLUDED ARE

ACADIA	ALLEN	ASCENSION
ASSUMPTION	AVOUELLES	BEAUREGARD
CALCASIEU	CAMERON	CATAHOULA
CONCORDIA	EAST BATON ROUGE	EAST FELICIANA
EVANGELINE	FRANKLIN	GRANT
IBERIA	IBERVILLE	JEFFERSON DAVIS
LAFAYETTE	LA SALLE	LIVINGSTON
MADISON	POINTE COUPEE	RAPIDES
ST. HELENA	ST. JAMES	ST. JOHN THE BAPTIST
ST. LANDRY	ST. MARTIN	ST. MARY
TANGIPAHOA	TENSAS	VERMILION
WASHINGTON	WEST BATON ROUGE	WEST FELICIANA

\$\$

MSC001-005-021-029-031-037-049-063-065-077-085-089-091-101-113-
121-123-127-129-147-149-157-051800-
/O.NEW.KWNS.TO.A.0005.040205T1140Z-040205T1800Z/

MS

. MISSISSIPPI COUNTIES INCLUDED ARE

ADAMS	AMITE	CLAIBORNE
COPIAH	COVINGTON	FRANKLIN
HINDS	JEFFERSON	JEFFERSON DAVIS
LAWRENCE	LINCOLN	MADISON
MARION	NEWTON	PIKE
RANKIN	SCOTT	SIMPSON
SMITH	WALTHALL	WARREN

WILKINSON

\$\$

NWSI 10-512

JULY 16, 2004

TXC245-361-051800-
/O.NEW.KWNS.TO.A.0005.040205T1140Z-040205T1800Z/

TX

. TEXAS COUNTIES INCLUDED ARE

JEFFERSON ORANGE

GMZ450-475-530-051800-
/O.NEW.KWNS.TO.A.0005.040205T1140Z-040205T1800Z/

CW

. ADJACENT COASTAL WATERS INCLUDED ARE

COASTAL WATERS FROM CAMERON LA TO HIGH ISLAND TX OUT 20 NM

WATERS FROM LOWER ATCHAFALYA RIVER TO CAMERON LA OUT 20 NM

LAKE PONCHARTRAIN/LAKE MAUREPAS

\$\$

ATTN...WFO...LCH...LIX...JAN...SHV...

Hourly Update

WOUS64 KWNS 051401
WOU5

TORNADO WATCH OUTLINE UPDATE FOR WT 5
NWS STORM PREDICTION CENTER NORMAN OK
801 AM CST THU FEB 5 2004

TORNADO WATCH 5 REMAINS IN EFFECT UNTIL NOON CST FOR THE
FOLLOWING LOCATIONS:

LAC005-007-009-011-025-029-033-037-039-041-043-045-047-055-059-063-
077-079-091-095-097-099-101-105-107-117-121-125-051800-
/O.CON.KWNS.TO.A.0005.000000T0000Z-040205T1800Z/

LA

. LOUISIANA PARISHES INCLUDED ARE

ASCENSION	ASSUMPTION	AVOYELLES
BEAUREGARD	CATAHOULA	CONCORDIA
EAST BATON ROUGE	EAST FELICIANA	EVANGELINE
FRANKLIN	GRANT	IBERIA
IBERVILLE	LAFAYETTE	LIVINGSTON
MADISON	POINTE COUPEE	ST. HELENA
ST. JAMES	ST. JOHN THE BAPTIST	ST. LANDRY
ST. MARTIN	ST. MARY	TANGIPAHOA
TENSAS	WASHINGTON	WEST BATON ROUGE
WEST FELICIANA		

\$\$

MSC001-005-021-029-031-037-049-063-065-077-085-089-091-101-113-
121-123-127-129-147-149-157-051800-
/O.CON.KWNS.TO.A.0005.000000T0000Z-040205T1800Z/

MS

. MISSISSIPPI COUNTIES INCLUDED ARE

ADAMS	AMITE	CLAIBORNE
COPIAH	COVINGTON	FRANKLIN
HINDS	JEFFERSON	JEFFERSON DAVIS
LAWRENCE	LINCOLN	MADISON
MARION	NEWTON	PIKE
RANKIN	SCOTT	SIMPSON
SMITH	WALTHALL	WARREN
WILKINSON		

\$\$

NWSI 10-512

JULY 16, 2004

GMZ450-475-530-051800-
/O.CON.KWNS.TO.A.0005.000000T0000Z-040205T1800Z/

CW

. ADJACENT COASTAL WATERS INCLUDED ARE

WATERS FROM LOWER ATCHAFALYA RIVER TO CAMERON LA OUT 20 NM

LAKE PONCHARTRAIN/LAKE MAUREPAS

\$\$

ATTN...WFO...LCH...LIX...JAN...SHV...

Final

WOUS64 KWNS 271701
WOU7

TORNADO WATCH OUTLINE UPDATE FOR WT 977
NWS STORM PREDICTION CENTER NORMAN OK
1101 AM CST THU NOV 27 2003

ALC003-007-013-023-025-035-047-053-065-091-097-099-105-119-129- 131-LAC005-007-033-045-047-051-057-
063-071-075-087-089-091-093-095- 101-103-105-109-117-121-MS023-031-035-039-041-045-047-059-065-067-
073-077-091-109-111- 113-131-147-153-271700-
/O.CAN.KWNS.TO.A.0977.000000T0000Z-0301127T1700Z/

TORNADO WATCH 977 IS NO LONGER IN EFFECT.

NO COUNTIES OR PARISHES REMAIN IN THE WATCH.

ATTN...WFO...MOB...LIX...JAN...LCH...BMX...
\$\$

8. Aviation Watch Notification Message.

WWUS30 KWNS 041913
SAW3
SPC AWW 041913
WW 689 SEVERE TSTM NY LO 042000Z - 050200Z
AXIS..90 STATUTE MILES EITHER SIDE OF LINE..
40ESE BGM/BINGHAMTON NY/ - 15WNW MSS/MASSENA NY/
..AVIATION COORDS.. 80NM EITHER SIDE /38NE AVP - 55NW SLK/
HAIL SURFACE AND ALOFT..2 1/2 INCHES. WIND GUSTS..70 KNOTS.
MAX TOPS TO 450. MEAN STORM MOTION VECTOR 270/30.

9. Public Watch Notification Message (Tornado and Severe Thunderstorm).

WWUS20 KWNS 050550
SEL3
-SPC WW 050550
ARZ000-MOZ000-OKZ000-051100-

URGENT - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH NUMBER 243
NWS STORM PREDICTION CENTER NORMAN OK
1250 AM CDT MON MAY 5 2003

THE NWS STORM PREDICTION CENTER HAS ISSUED A
TORNADO WATCH FOR PORTIONS OF

WESTERN AND CENTRAL ARKANSAS
SOUTHERN MISSOURI
FAR EASTERN OKLAHOMA

EFFECTIVE THIS MONDAY MORNING FROM 1250 AM UNTIL 600 AM CDT.

...THIS IS A PARTICULARLY DANGEROUS SITUATION...
DESTRUCTIVE TORNADOES...LARGE HAIL TO 2 INCHES IN DIAMETER...

THUNDERSTORM WIND GUSTS TO 70 MPH...AND DANGEROUS LIGHTNING ARE
POSSIBLE IN THESE AREAS.

THE TORNADO WATCH AREA IS ALONG AND 100 STATUTE MILES EAST AND
WEST OF A LINE FROM 15 MILES WEST NORTHWEST OF FORT LEONARD WOOD
MISSOURI TO 45 MILES SOUTHWEST OF HOT SPRINGS ARKANSAS.

REMEMBER...A TORNADO WATCH MEANS CONDITIONS ARE FAVORABLE FOR
TORNADOES AND SEVERE THUNDERSTORMS IN AND CLOSE TO THE WATCH AREA.
PERSONS IN THESE AREAS SHOULD BE ON THE LOOKOUT FOR THREATENING
WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE
WARNINGS.

OTHER WATCH INFORMATION...THIS TORNADO WATCH REPLACES TORNADO
WATCH NUMBER 237. WATCH NUMBER 237 WILL NOT BE IN EFFECT AFTER
1250 AM CDT. CONTINUE...WW 239...WW 240...WW 241...WW 242...

DISCUSSION...SRN MO SQUALL LINE EXPECTED TO CONTINUE EWD...WHERE
LONG/HOOKED HODOGRAPHS SUGGEST THREAT FOR EMBEDDED
SUPERCELLS/POSSIBLE TORNADOES. FARTHER S...MORE WIDELY SCATTERED
SUPERCELLS WITH A THREAT FOR TORNADOES WILL PERSIST IN VERY STRONGLY

DEEP SHEARED/LCL ENVIRONMENT IN AR.

AVIATION...TORNADOES AND A FEW SEVERE THUNDERSTORMS WITH HAIL
SURFACE AND ALOFT TO 2 INCHES. EXTREME TURBULENCE AND SURFACE WIND
GUSTS TO 60 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 500.
MEAN STORM MOTION VECTOR 26045.

...CORFIDI
;374,0903 340,0915 340,0952 374,0941

10. Watch Status Message.

WOUS20 KWNS 271241
WWASPC
SPC WW-A 271245

STATUS REPORT ON WW 977

SEVERE WEATHER THREAT CONTINUES SOUTH OF A LINE FROM 15 SSW MCB TO 25
NNE SEM.

..EDWARDS..11/27/03

ATTN...WFO...MOB...BMX...LIX...LCH...JAN...

&&

SEVERE WEATHER THREAT CONTINUES FOR THE FOLLOWING AREAS:

ALC003-013-023-025-035-047-053-091-097-099-129-
131-271700-

AL
. ALABAMA COUNTIES INCLUDED ARE

BALDWIN	BUTLER	CHOCTAW
CLARKE	CONECUH	DALLAS
ESCAMBIA	MARENGO	MOBILE
MONROE	WASHINGTON	WILCOX

\$\$

LAC005-007-033-045-047-051-057-063-071-075-087-089-091-093-095-
101-103-105-109-117-121-271700-

LA
. LOUISIANA PARISHES INCLUDED ARE

ASCENSION	ASSUMPTION	EAST BATON ROUGE
IBERIA	IBERVILLE	JEFFERSON
LAFOURCHE	LIVINGSTON	ORLEANS
PLAQUEMINES	ST. BERNARD	ST. CHARLES
ST. HELENA	ST. JAMES	ST. JOHN THE BAPTIST
ST. MARY	ST. TAMMANY	TANGIPAHOA
TERREBONNE	WASHINGTON	WEST BATON ROUGE

\$\$

MSC-035-039-041-045-047-059-067-073-091-109-111-
113-131-147-153-271700-

MS

. MISSISSIPPI COUNTIES INCLUDED ARE

FORREST	GEORGE	GREENE
HANCOCK	HARRISON	JACKSON
JONES	LAMAR	MARION
PEARL RIVER	PERRY	PIKE
STONE	WALTHALL	WAYNE
\$\$		